

IN THE CLAIMS:

Please amend claims 1-4 as shown below, in which deleted terms are shown with strikethrough and/or double brackets and added terms are shown with underscoring. Also, please add new claims 5-12 as shown below.

1. (Currently amended) A ranging apparatus which determines distances to objects by using planar positions of said objects in images which are obtained by plural image acquiring means comprising:

plural cameras that function as said plural image acquiring means,

plural distortion correction means to correct distortion of images taken by said cameras wherein said plural distortion correction means ~~are made for~~ progressively determine[[d]] ranging distances of [[said]] a target object,

a corrective computation means which generates corrected images by using said distortion correction means, being corrected for eliminating distortion caused by optical systems used for said cameras, corresponding to said progressively determined ranging distances in which said images are taken by said image acquiring means,

a corrected image selection means which selects a most appropriately corrected image among said corrected images and;

a ranging computation means which computes a distance to said object viewed in said corrected image selected by said corrected image selection means.

2. (Currently amended) A ranging apparatus according to Claim 1, wherein[[;]] said corrected image selection means selects a corrected image which has best coincidence between said object specified in reference images which are corrected images, being generated by said corrective computation means, of said acquired images taken by one of said cameras and said object specified in comparison images which are corrected images, being generated by said corrective computation means, of said acquired images taken by [[one]] another of ~~the other~~ said cameras,

of which said coincidence is evaluated for picture elements that compose an image of

said ~~target~~ object in said reference image against an image of said ~~target~~ object that is searched over picture elements, being included in said comparison image, corresponding to an area shifted by a parallax to said object given for said progressively determined ranging distance in which said reference image and said comparison image are generated.

3. (Currently amended) A ranging method which determines distances to objects by using planar positions of said objects in images which are obtained by ~~image-acquiring means~~ cameras comprising:

a first step wherein plural said cameras ~~that function as said image-acquiring means~~ take images of a target object,

a second step wherein plural corrected images are generated from images acquired by said ~~image-acquiring means~~ cameras after eliminating distortion caused by optical systems ~~used for~~ of said cameras, ~~that function as said image-acquiring means~~ wherein said distortion is computed by ~~[[said]]~~ plural distortion correction means which ~~are made for~~ progressively determine~~[[d]]~~ ranging distances of said object,

a third step wherein a corrective image is selected among plural corrective images generated in said second step; and~~[[;]]~~

a fourth step wherein ranging distance to said object ~~viewed~~ in said corrected image selected in said third step is computed.

4. (Currently amended) A ranging program by which a computer system determines distances to objects by using planar positions of said objects in images which are obtained by ~~image-acquiring means~~ cameras, wherein said ~~computer system functions as;~~ ranging program includes operations of:

~~plural distortion correction means to~~ correcting distortion of images taken by plural cameras ~~that function as said image-acquiring~~ using plural distortion correction means, wherein said plural distortion correction means ~~are made for~~ progressively determine~~[[d]]~~ ranging distances of ~~[[said]]~~ a target object,

~~a corrective computation means which generates~~ generating corrected images ~~[[by]]~~

using said distortion correction means, being corrected for eliminating distortion caused by optical systems ~~used for~~ of said cameras, corresponding to said progressively determined ranging distances in which said images are taken by said ~~image-acquiring means~~ cameras,

~~a corrected image selection means which selects~~ selecting a most appropriately corrected image among said corrected images and;

~~a ranging computation means which computes~~ computing a distance to said object viewed in said selected corrected image ~~selected by said corrected image selection means~~.

5. (New) A ranging method according to Claim 3, wherein;

said third step involves selecting a corrected image which has best coincidence between said object specified in reference images which are corrected images, being generated in said second step, of said images taken by one of said cameras in said first step and said object specified in comparison images which are corrected images, being generated in said second step, of said images taken by another of said cameras,

of which said coincidence is evaluated for picture elements that compose an image of said object in said reference image against an image of said object that is searched over picture elements, being included in said comparison image, corresponding to an area shifted by a parallax to said object given for said progressively determined ranging distance in which said reference image and said comparison images are generated.

6. (New) A ranging program according to Claim 4, wherein;

said selecting operation selects a corrected image which has best coincidence between said object specified in reference images which are corrected images, being generated in said generating operation, of said images taken by one of said cameras and said object specified in comparison images which are corrected images, also generated in said generating step, of said images taken by another of said cameras,

of which said coincidence is evaluated for picture elements that compose an image of said object in said reference image against an image of said object that is searched over picture elements, being included in said comparison image, corresponding to an area shifted by a

parallax to said object given for said progressively determined ranging distance in which said reference image and said comparison image are generated.

7. (New) A ranging apparatus according to Claim 1, wherein said distortion correction means comprise a distortion correction table prepared in advance for said cameras.

8. (New) A ranging apparatus according to Claim 1, wherein said distortion correction means comprise distortion correction tables prepared in advance for said cameras, respectively.

9. (New) A ranging method according to Claim 3, wherein said distortion correction means comprise a distortion correction table prepared in advance for said cameras.

10. (New) A ranging method according to Claim 3, wherein said distortion correction means comprise distortion correction tables prepared in advance for said cameras, respectively.

11. (New) A ranging program according to Claim 4, wherein said distortion correction means comprise a distortion correction table prepared in advance for said cameras.

12. (New) A ranging program according to Claim 1, wherein said distortion correction means comprise distortion correction tables prepared in advance for said cameras, respectively.